PIOB-00999

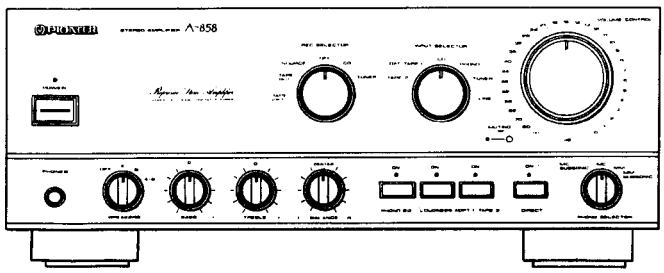
PIONEER®
The future of sound and vision.

Operating Instructions

A-858

English

STEREO AMPLIFIER



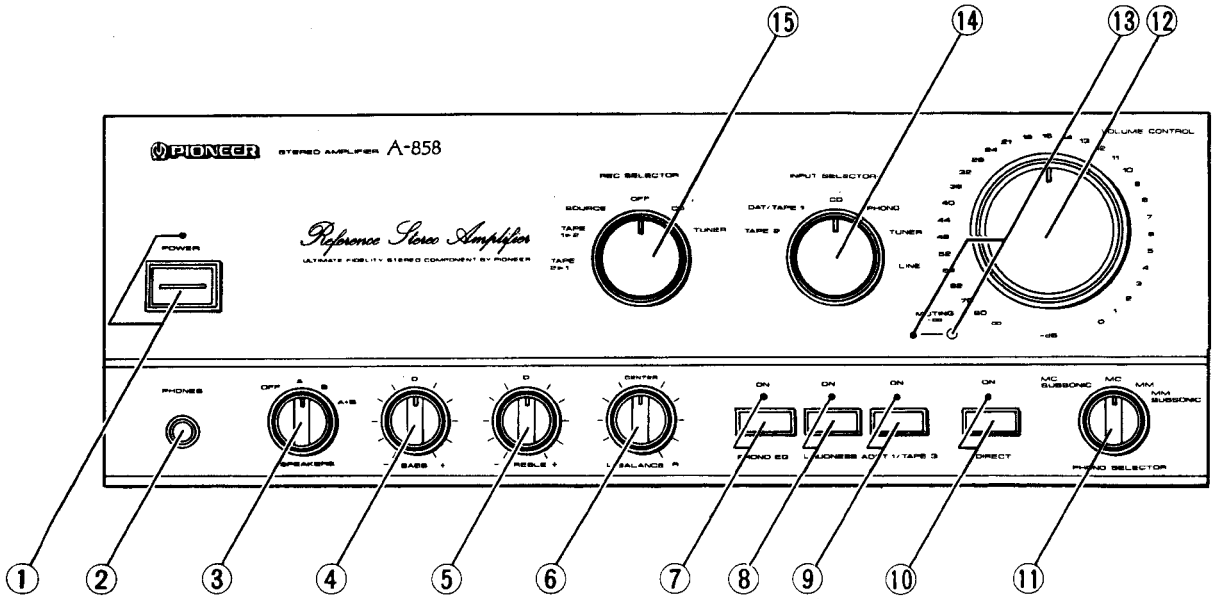
IMPORTANT

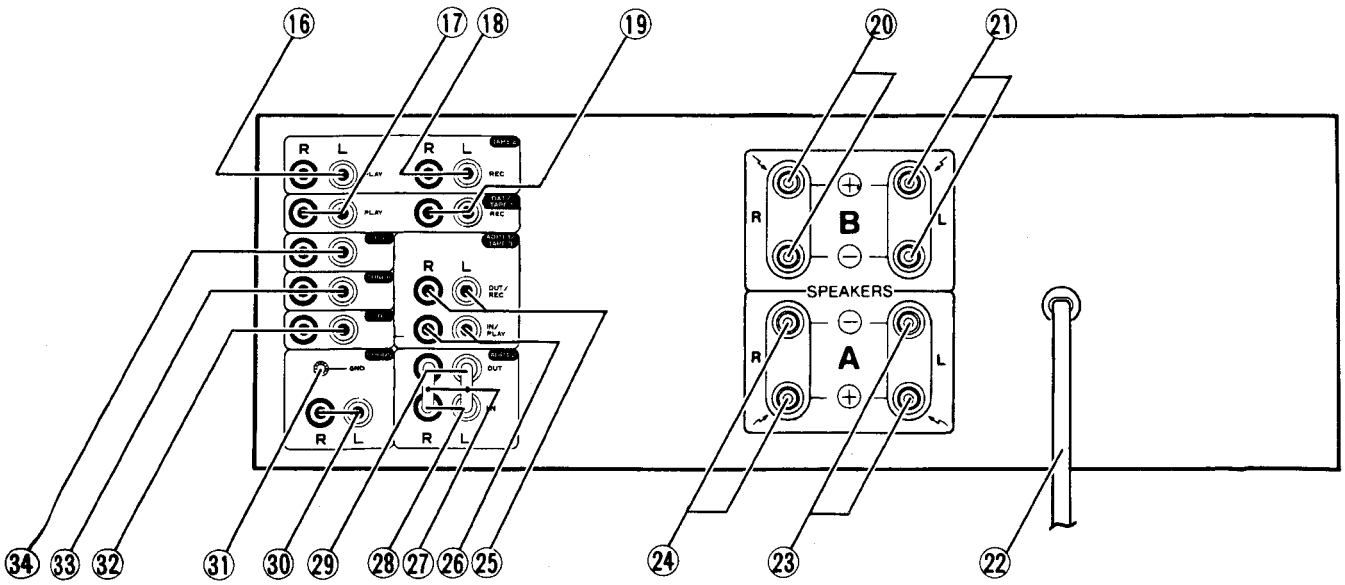
The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.


PIONEER
STEREO AMPLIFIER A-858
Reference Stereo Amplifier
POWER
PHONES
SPEAKERS
BASS
TREBLE
BALANCE
PHONO EQ
LOUDNESS
TAPE 3
DIRECT
PHONO SELECTOR
REC SELECTOR
INPUT SELECTOR
VOLUME CONTROL
15
14
13
12
1
2
3
4
5
6
7
8
9
10
11


16
17
18
19
20
21
R
L
PLAY
REC
OUT/REC
IN/PLAY
GND
B
A
SPEAKERS
34
33
32
31
30
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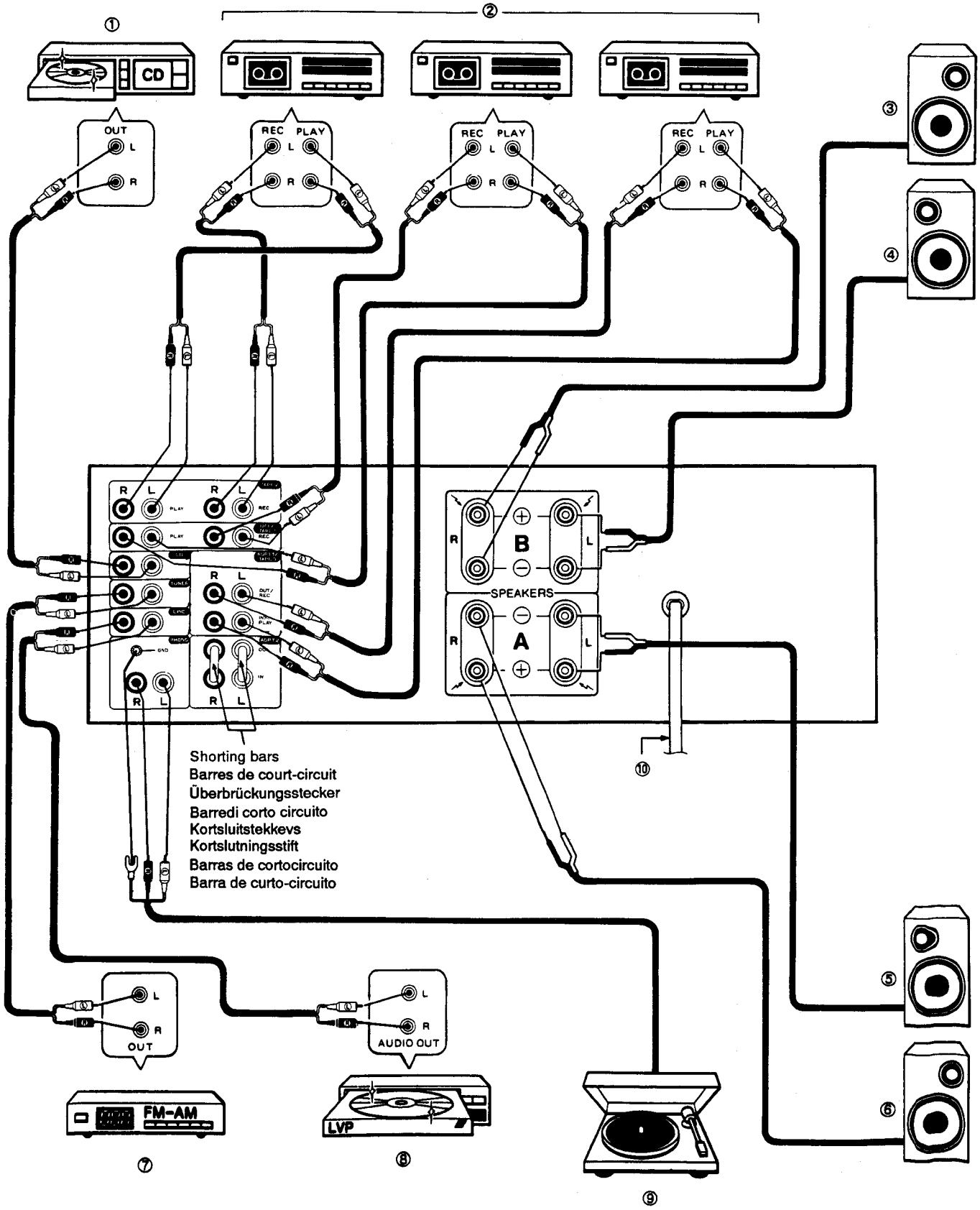
①
②
CD
OUT
L
R
REC PLAY
③
④
SPEAKERS
B
A
Shorting bars
Barres de court-circuit
Überbrückungsstecker
Barredi corto circuito
Kortsluitstekkevs
Kortslutningsstift
Barras de cortocircuito
Barra de curto-circuito
⑩
⑤
⑥
OUT
AUDIO OUT
FM-AM
LVP
⑦
⑧
⑨

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

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FEATURES

- Drive capacity 180W + 180W/4 Ω (DIN), 120W + 120W/8 Ω (DIN) matching to high power and low-impedance-type speaker system.
- The use of DIRECT circuit assures high fidelity playback of consistent frequency characteristics, accompanied by maximum clarity.
- REC SELECTOR switch makes tape editing very simple.
- Clean ground technology prevents noise on power line to flow to the signal ground line, permitting clean sound reproduction.
- Non-Switching Circuit Type III is employed to realize high quality sound, with minimum distortion.
- Comes with a built-in phono equalizer which accepts MC cartridge.
- Casted Power Transformer
- Honeycomb Frame Chassis
- Honeycomb Heat Sink

PANEL FACILITIES

See page 2 for Panel Facilities.

[FRONT PANEL]

① POWER switch/indicator

Press to turn power to the unit ON and OFF.
When the power is ON, indicator lights.

② PHONES jack

When using headphones, insert the plug into this jack.

③ SPEAKERS selector switch

Use this switch to listen to the speaker systems connected to the SPEAKERS terminals.

OFF:

Released position: No sound is heard from the speaker system.
Set to this position when listening with headphones.

A:

For reproduction of sound with the speaker systems connected to the SPEAKERS A terminals.

B:

For reproduction of sound with the speaker systems connected to the SPEAKERS B terminals.

A + B:

For reproduction of sound with the speaker systems connected to SPEAKERS A and B terminals.

④ BASS tone control

Use to adjust the low-frequency tone at low volume level. The center position is the flat (normal) position. When turned to the right, low-frequency tones are emphasized; when turned to the left, low-frequency tones are de-emphasized.

NOTE:
This function does not operate when the DIRECT switch is in the ON position.

⑤ TREBLE tone control

Use to adjust the high-frequency tone at low volume level.
The center position is the flat (normal) position. When turned to the right, high-frequency tones are emphasized; when turned to the left, high-frequency tones are de-emphasized.

NOTE:
This function does not operate when the DIRECT switch is in the ON position.

⑥ BALANCE control

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the LEFT position and if the left side is louder, turn toward the RIGHT position.

NOTE:
This function does not operate when the DIRECT switch is in the ON position.

⑦ PHONO EQ switch/indicator

When not using a phono input, turn the phono equalizer power circuit off in order to prevent it from collecting noise during playback of other sources.

ON:

The indicator lights: Always set to this position when using a phono input. Immediately after turning ON, audio signal will be muted for several seconds until circuit operation becomes stable.

OFF:

The indicator goes off: Set to this position when not using a phono input.

⑧ LOUDNESS switch/indicator

Use when listening at low volume levels.

ON:

The indicator lights: Boosts low and high frequencies to give added punch to playback even at low-volume.

OFF:

The indicator goes off: Should normally be left in this position.

NOTE:
This switch does not operate when the DIRECT switch is in the ON position.

⑨ ADPT 1/TAPE 3 switch/indicator

Use this switch to listen to tape playback, or to listen to the sounds being recorded during tape recording.

ON:

The indicator lights: Press when listening to the playback sound of the tape deck or the adaptor connected to the ADPT 1/TAPE 3 IN/PLAY terminals, or to monitor the sound being recorded on the tape deck connected to the ADPT 1/TAPE 3 OUT/REC terminals.

OFF:

The indicator goes off: Normally leave the switch in this position.

NOTE:
When the DIRECT switch is set to ON, this function does not operate and no signal is output at the ADPT 1/TAPE 3 OUT/REC terminals.

⑩ DIRECT switch/indicator

Use this switch when you do not wish to pass the output from input terminal equipment through the various frequency adjusting circuits and adaptor terminals (ADPT 1/TAPE 3, ADPT 2, BASS, TREBLE, BALANCE, LOUDNESS).

ON:

When the switch is in this position, the indicator lights and the signals input from the input terminals are reproduced without passing through the various frequency-adjusting circuits. This results in flat, pure sound which is a more faithful reproduction of the input source.

OFF:

When the switch is in this position the indicator goes out and the signal passes through the various frequency adjusting circuits.

⑪ PHONO SELECTOR switch

Set in accordance with the type of cartridge used in you turntable.

MM:

Set to this position when using a moving magnet cartridge, or a MC (moving coil) cartridge with high output of 1 mV or more.

MC:

Set to this position when using a moving coil cartridge.

MM SUBSONIC/MC SUBSONIC:

Subsonic filter for moving coil or moving magnet cartridges to cut ultralow frequency noise less than 17 Hz generated when playing a warped record.

When using a high-output moving coil cartridge, set this switch to MM or MM SUBSONIC.

⑫ VOLUME CONTROL

Use to adjust volume level.

NOTE:
This unit is equipped with a circuit that attenuates the effect of tone and loudness controls at volume is turned up.

⑬ MUTING switch/indicator

Use to temporarily cut sound volume.

ON:

The indicator lights. The sound volume will be cut off.

OFF:

The indicator goes off. The sound will return to its previous volume.

⑭ INPUT SELECTOR switch

Use to select playback source.

LINE:

Set to this position when listening to the programs from a component connected to the LINE terminals.

TUNER:

Set to this position when listening to AM or FM broadcasts with a tuner.

PHONO:

Set to this position when listening to record playback on a turntable.

CD:

Set to this position when listening to a compact disc playback with a CD player.

DAT/TAPE 1:

For playback with a tape deck or digital audio tape deck connected to the DAT/TAPE 1 terminals.

TAPE 2:

For playback with a tape deck connected to the TAPE 2 terminals.

⑮ REC SELECTOR switch

Switch to select recording signal. When set at other than SOURCE or OFF position, signals can be recorded during playback of the equipment selected by INPUT SELECTOR switch.

TUNER:

To record from a TUNER.

CD:

To record from a CD player.

OFF:

In this position nothing from the REC terminals of DAT/TAPE 1 and TAPE 2 will be output. Select it when not recording; output to tape decks will be disconnected, improving sound quality.

SOURCE:

To record the equipment selected by INPUT SELECTOR switch.

TAPE:

1 ▶ 2

To record (copy) from the tape deck of DAT/TAPE 1 terminals, over to the tape deck of TAPE 2 terminals.

2 ▶ 1

To record (copy) from the tape deck of TAPE 2 terminals, over to the tape deck of DAT/TAPE 1 terminals.

NOTE:
The REC SELECTOR switch has no effect on the recording out put of the ADPT 1/TAPE 3 terminals.

[REAR PANEL]

⑯ TAPE 2 PLAY terminals.
⑰ DAT/TAPE 1 PLAY terminals.
⑱ TAPE 2 REC terminals.
⑲ DAT/TAPE 1 REC terminals.
⑳ SPEAKERS B terminals (right channel).
㉑ SPEAKERS B terminals (left channel).
㉒ Power cord.

Connect this cord to an AC wall socket, or the AC outlet of an audio timer.

㉓ SPEAKERS A terminals (left channel).
㉔ SPEAKERS A terminals (right channel).
㉕ ADPT 1/TAPE 3 OUT/REC terminals.
㉖ ADPT 1/TAPE 3 IN/PLAY terminals.
㉗ Shorting bars.
㉘ ADPT 2 IN terminals.
㉙ ADPT 2 OUT terminals.
㉚ PHONO terminals.
㉛ Turntable ground terminal (GND).
㉜ LINE terminals.
㉝ TUNER terminals.
㉞ CD terminals.

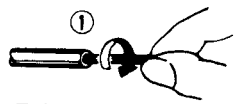
CONNECTIONS

See page 3 for Connections.

① **CD player.**
② **Tape decks.**
③ **Speaker system B (R).**
④ **Speaker system B (L).**
⑤ **Speaker system A (L).**
⑥ **Speaker system A (R).**
⑦ **Tuner**
⑧ **Video disc playter, VCR etc...**
⑨ **Turntable.**
⑩ **To an AC wall socket.**

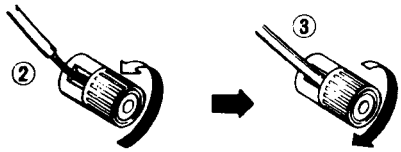
CONNECTING SPEAKER CORDS

1. **Strip off the vinyl covering and twist the tip of the wire core.**



Twist the wire core.

2. **Loosen the knob and insert the wire core into the terminal hole.**
3. **Tighten the knob to fix the wire core in place.**

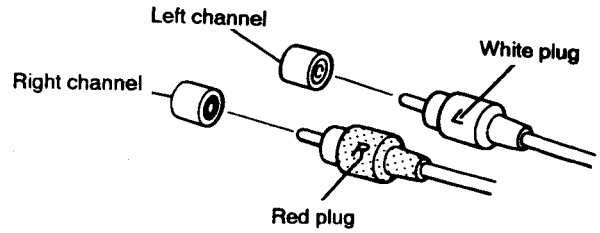


NOTE:
Do not allow the wire core to protrude and touch other terminals or wires. If the cores of different wires touch, damage may be caused to your components.

Speaker Impedance

When speaker systems are connected to only one of the SPEAKERS A or B terminals, such speakers should have rated impedance in the range of 4 – 16 Ω .
When speakers are connected to both the A and B terminals, they should have a rated impedance in the range of 8 – 32 Ω .

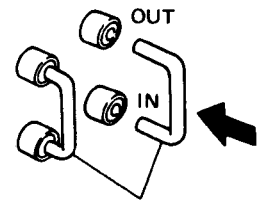
CONNECTING INPUT/OUTPUT CORDS



Connect the white plug to the L (left) side, and the red plug to the R (right) side. Be sure to push the plugs in securely.

TO USE THE COMPONENT CONNECTED TO THE ADAPTOR TERMINALS

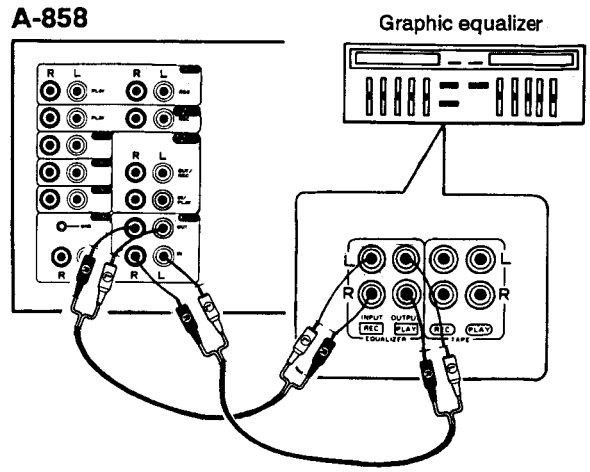
1. **Set the POWER switch to OFF.**
2. **Remove the two shorting bars from the ADPT 2 terminals.**



Shorting bars.

NOTE:
Remove the shorting bars to connect a graphic equalizer to these terminals. Always keep the bars inserted while the terminals are not in use, and take care not to lose them.

A-858



OPERATIONS

BEFORE BEGINNING OPERATIONS

Set the controls and switches as follows: See page 2.

1. **Set the VOLUME CONTROL to minimum. ⑫**
2. **Set the POWER switch to ON. ①**
3. **Set the SPEAKERS switch to A, B or A + B. ③**
4. **Set the BALANCE control to the center position. ⑥**
5. **Set the DIRECT switch to OFF. ⑩**
6. **Set the ADPT 1/TAPE 3 switch to OFF. ⑨**

PLAYBACK PROCEDURES

1. **Set the INPUT SELECTOR or ADPT 1/TAPE 3 switch. ⑭, ⑨**

How to select playback source;

- When listening to programs from equipment connected to the LINE terminals: Set to [LINE].
- When listening to an AM/FM broadcast: Set to [TUNER].
- When listening to a record: Set to [PHONO].
  PHONO EQ switch to ON.
  Set PHONO SELECTOR switch to MM (MM SUBSONIC) or MC (MC SUBSONIC) according to the type of cartridge being used.
- When listening to a compact disc: Set to [CD].
- When listening to a tape: Set to [DAT/TAPE 1], [TAPE 2] or [ADPT 1/TAPE 3].

2. **Operate the playback equipment.**
3. **Adjust playback volume with the VOLUME CONTROL on this unit. ⑫**

RECORDING TAPES

1. **Select the recording source with REC SELECTOR switch. ⑮**

- When set to the SOURCE position, the signals from the device selected by INPUT SELECTOR switch are recorded. (To record signals from the device connected to the PHONO or LINE terminals, set the REC SELECTOR switch to SOURCE and set the INPUT SELECTOR switch to PHONO or LINE.)
  When recording the signal from PHONO terminal, set PHONO EQ switch to ON position.
- Recording is impossible with the switch set to OFF.

NOTE:
When this switch is set at other than SOURCE position, the equipment selected by REC SELECTOR switch can be recorded, regardless of the setting of INPUT SELECTOR and DIRECT switches.

2. **When using the tape deck connected to the ADPT 1/TAPE 3 terminals for recording.**

The source selected with the INPUT SELECTOR will be recorded, regardless of the REC SELECTOR position.
However, recording will not be possible when the DIRECT switch is ON.

3. **Begin recording by operating the source equipment and tape deck.**

Refer to the operating instructions for your tape deck for proper operating procedures.

MONITORING WHILE RECORDING

When recording of the tuner or CD only.
On a 3-head tape deck, sound can be concurrently heard while recording. This operation of checking the sound quality and recording level is called "monitoring." At the time of monitoring, set the INPUT SELECTOR switch of this equipment in the following way, to match the tape deck on which recording is being done.

- When recording on the tape deck of DAT/TAPE 1 terminals:
  Set to DAT/TAPE 1.
- When recording on the tape deck of TAPE 2 terminals:
  Set to TAPE 2.
- When recording on the tape deck of ADPT 1/TAPE 3 terminals:
  ADPT 1/TAPE 3 switch to ON.

COPYING TAPES

When two decks (or a double cassette deck) are used, you can record the sounds from one deck onto the other.

Application examples:

- To make a tape copy with contents identical to the original tape.
- To edit a recording of a radio broadcast in order to cut out unwanted commercials, reocrding only desired material onto another tape.

When using two tape decks

1. **Load tapes for playback (pre-recorded tape) and recording into the respective tape decks.**
2. **Select the tape deck to be copied with REC SELECTOR switch.**

- When copying from the tape deck of DAT/TAPE 1 terminals, to the tape deck of TAPE 2 terminals: Set to 1 ▶ 2.
- When copying from the tape deck of TAPE 2 terminals, to the tape deck of DAT/TAPE 1 terminals: Set to 2 ▶ 1.

NOTE:
The tape selected with REC SELECTOR switch can be copied, regardless of the settings of INPUT SELECTOR and DIRECT switches.

3. **Operate the tape decks to begin copying.**

Set the tape deck with the original (playback) tape to the playback mode, and set the tape deck with the blank tape to the recording mode.

Playback using a graphic equalizer

As to A-858, it can deal with playback of all sources when connecting a graphic equalizer to the ADPT 2 terminals. However, playback is not possible when the DIRECT switch is ON.

NOTE:
Remove the shorting bars before using these terminals. Always keep the bars inserted while the terminals are not in use, and take care not to lose them.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Probable Cause	Remedy
No power supplied to unit	• Power plug is disconnected from outlet. • The component power plug has been plugged into another component power outlet (e.g. timer, etc.), but power to that unit is disconnected.	• Insert plug securely in outlet. • Turn on power to the other component.
No sound	• Connecting cords are disconnected from terminals, or connected incorrectly. • Terminals, or connecting cords pin plugs are dirty. • The INPUT SELECTOR or ADPT 1/TAPE 3 switch selected does not match the component being played back. • Operation of other components is incorrect. • The SPEAKERS selector switch is set to "OFF". • The PHONO EQ switch is "OFF" position. • Shorting bars are not inserted into the ADPT 2 terminals.	• Connect securely. • Clean terminals and plugs. • Set switches correctly (PHONO, TUNER, CD, LINE, DAT/TAPE 1, TAPE 2). Set the ADPT 1/TAPE 3 to OFF. • Consult the opeating instructions for the other components. • Set the switch to "A", "B" or "A + B". • Set PHONO EQ switch to "ON" position. • Insert the shorting bars properly.
No sound from one speaker	• Connecting cords or speaker cords are disconnected on that side. • BALANCE control has been adjusted to one side.	• Connect securely. • Adjust BALANCE control to center position.
Can't record tapes	• The position of the REC SELECTOR switch is incorrect. • Connections are incorrect. • Operation of tape deck is incorrect.	• Set switch correctly. (See section "RECORDING TAPES"). • Reconnect cords properly. • Consult the operating instructions for the tape deck.
Can't perform tape copying	• The position of the REC SELECTOR switch is incorrect. • Operation of tape decks is incorrect.	• Set switch correctly (See section "COPYING TAPES"). • Consult the operating instructions for the tape decks.

SPECIFICATIONS

Continuous power output (both channels driven at 20 Hz to 20 kHz)**
- T.H.D. 0.003%, 8 Ω ..... 105W + 105W*
- T.H.D. 0.005%, 4 Ω ..... 160W + 160W*

DIN continuous power output (both channels driven)
- 1 kHz, T.H.D. 1.0%, 8 Ω ..... 120W + 120W
- 1 kHz, T.H.D. 1.0%, 4 Ω ..... 180W + 180W

Power bandwidth
- 0.05%, 8 Ω ..... 5 Hz – 60 kHz*

Damping factor
- (1 kHz/20 Hz to 20 kHz), 8 Ω 200/70

Dynamic power output (on EIA dynamic test signal)
- 4 Ω /2 Ω 230W/350W

Total harmonic distortion **
- 20 Hz to 20 kHz, 105W, 8 Ω 0.003%*
- 20 Hz to 20 kHz, 160W, 4 Ω 0.005%*

Inter-modulation distortion (at rated output) 0.003%*

Input sensitivity/impedance
- PHONO (MM) ..... 2.5 mV/50 k Ω
- PHONO (MC) ..... 0.2 mV/100 Ω
- CD, TUNER, LINE, TAPE ..... 150 mV/50 k Ω

PHONO overload level
- 1 kHz, T.H.D. 0.008% (MM/MC) ..... 200 mV/19 mV

Output level/impedance
- TAPE REC, ADAPTOR OUTPUT ..... 150 mV/2.2 k Ω

Frequency response
- PHONO (MM), 20 Hz to 20 kHz ..... ± 0.2 dB
- PHONO (MC), 20 Hz to 20 kHz ..... ± 0.3 dB
- CD, TUNER, LINE, TAPE (1 Hz to 150 kHz) ..... $^{+0}_{-3}$ dB*

Tone control (volume control set at –40 dB position)
- BASS ..... ± 8 dB (100 Hz)
- TREBLE ..... ± 8 dB (10 kHz)

MUTING ..... – ∞

Loudness contour (volume control set at –40 dB position)
- ..... +5 dB (100 Hz)/+3 dB (10 kHz)

Filter (SUBSONIC) ..... 17 Hz (12 dB/oct.)

Signal-to-Noise ratio (IHF short circuit, A network)
- PHONO (MM, 5 mV input/MC, 0.5 mV input) ... 95 dB/77 dB*
- CD, TUNER, LINE, TAPE ..... 110 dB*

Signal-to-Noise ratio (DIN, continuous power/50 mW)
- PHONO (MM) ..... 74 dB/65 dB*
- CD, TUNER, LINE, TAPE ..... 92 dB/68 dB*

Power Supply/Miscellaneous

Power requirements ..... a.c. 220 Volts ~, 50/60 Hz
Power consumption 1,000W
Dimensions ..... 420 (W) × 474 (D) × 172 (H) mm
Weight (without package) ..... 24.5 kg

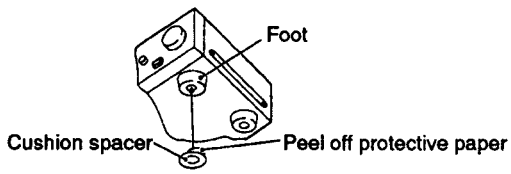
Accessories

Operating instructions 1
Cushion spacer set 1

NOTE:
Specifications and design subject to possible modification without notice, due to improvements.

* Measured with the DIRECT switch set to ON.
** Measured by Audio Spectrum Analyzer.

Be sure to place the unit on a level surface so that it stands firmly on all its feet. If wobbly, adjust by attaching the supplied cushion spacers to one or more feet.



POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

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